

Racial and Ethnic Disparities in Foodborne Illness, 2000

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Background: Food preference and preparation methods vary by race and ethnicity. Several foodborne disease outbreaks have been associated with practices unique to certain populations. Outbreaks of *Listeria monocytogenes* (Lm) and *Yersinia enterocolitica* infections have been associated with unpasteurized cheese in Hispanics and with chitterlings in African-American communities. We examined how the burden of foodborne illness varies in the US among specific racial and ethnic groups compared to whites.

Methods: In 2000, the Foodborne Diseases Active Surveillance Network (FoodNet) conducted surveillance for laboratory-diagnosed cases of *Campylobacter*, *Escherichia coli* O157, Lm, *Salmonella* (including *S. Typhi*), *Shigella*, *Vibrio*, and *Yersinia* in the states of CT, GA, MN and OR and selected counties in CA, MD, NY and TN. The catchment area included 29.5 million persons, 11% of the US population. We compared rates of laboratory-diagnosed illness for Hispanics, African-Americans, and Asians with rates for Whites.

Results: The incidence per 100,000 population of infections of *Campylobacter* was 16.0, *E. coli* O157 2.3, Lm 0.4, non-typhoidal *Salmonella* 14.5, *S. Typhi* 0.1, *Shigella* 8.0, *Vibrio* 0.2, and *Yersinia* 0.5. The incidence was higher in Hispanics than non-Hispanic Whites for *Shigella* (RR=2.8, 95% CI=2.4-3.3) and *S. Typhi* (14.6, 4.2-50.4). The incidence was higher in African-Americans than Whites for *Shigella* (1.5, 1.4-1.8) and *Yersinia* (6.0, 3.9-9.3) but not for *E. coli* O157 (0.2, 0.1-0.3) or *Campylobacter* (0.4, 0.3-0.5). The incidence was higher in Asians than Whites for *Yersinia* (3.8, 1.8-8.2), *Vibrio* (5.1, 2.2-11.9) and *S. Typhi* (45.7, 16.3-128.2) but not for *E. coli* O157 (0.2, 0.3-0.8) or *Shigella* (0.5, 0.3-0.7).

Conclusion: The marked variation in rates of illness among ethnic and racial groups suggests that further work is needed to identify high-risk food consumption practices and to target educational messages to these populations. Physicians evaluating patients with enteric bacterial infections should ask about food habits that may be unique to a patient's ethnicity or race. Physicians should also consider incorporating food safety education into routine health maintenance.

[Racial and ethnic disparities in foodborne illness, 2000 poster](#) (4.08 MB)

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